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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,765	11/30/2001	Akihiko Hitomi	011573	4870
23850	7590	04/05/2005	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			KUMAR, PANKAJ	
1725 K STREET, NW				
SUITE 1000			ART UNIT	
WASHINGTON, DC 20006			263i	
			PAPER NUMBER	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,765

Applicant(s) **U**

HITOMI ET AL.

Examiner

Pankaj Kumar

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/25/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang 5896177 in view of Ecklund USPN 5050237. Here is how the references teach the claim:
3. As per claim 1: A receiver for receiving a digital broadcast having a transmission spectrum format which is prepared by dividing digital data comprising a single bit stream into a plurality frames capable of holding the same contents as the allocating different carrier frequencies the respective frames and arranging the bit frames frequency axis, the digital broadcast receiver comprising (preamble is addressed below) a tuner (Hwang fig. 3: 12) selecting from among a plurality of broadcasting stations and receiving the digital broadcast of the selected station, a demodulator circuit (not in Hwang but would be obvious as explained below) for decoding (Hwang fig. 3: 22) a plurality frames (Hwang col. 6 lines 7-8: present invention using NTSC; col. 2 lines 21-26: NTSC has frames) constituting the received digital broadcast (Hwang col. 6 lines 7-8: TV signal receiver) and outputting the decoded bit frames (Hwang fig. 3: output of the decoder 22) and a control circuit for controlling the operation of the tuner and the demodulator circuit (Hwang fig. 3: filter 14 controls the tuner 14 and the decoder 22), the digital (Hwang fig. 3: 52, 56) broadcast receiver (Hwang col. 1 line 24: TV receiver) being

Art Unit: 2631

characterized in that the control circuit (Hwang fig. 3: filter 14 controls the tuner 14 and the decoder 22).

4. Hwang does not teach demodulator. The office takes official notice that a received signal has to be demodulated to an appropriate frequency in order for data to be received correctly.

Thus, it would have been obvious, to one of ordinary skill in the art, at time the invention was made, to modify the prior art teaching of Hwang with the demodulator as recited by the instant claims, because Hwang suggests tuning a television signal which have high frequency in the analogous art of receiver.

5. Hwang does not teach decoding control means for stopping decoding at least one of the bit frames with one broadcasting station selected, search means for searching for other broadcasting station or stations of satisfactory reception condition utilizing free time resulting from stopping decoding, and selected station changeover means broadcasting station being selected for changing over reception to the broadcasting station searched for. Ecklund teaches decoding control means for stopping decoding at least one of the bit frames (Ecklund col. 2 lines 63-64, col. 3 lines 23-30: filters in decoder fully minimize the bandwidth to minimize sounds - col. 3 lines 23-30 - while the station is being changed -col. 2 lines 63-64 - and thus decoding is stopped since there is no data to decode), with one broadcasting station selected (Ecklund col. 2 line 62: tuned to a broadcast station), search means for searching for other broadcasting station or stations of satisfactory reception condition (Ecklund col. 2 lines 63-64: begins to tune to another station) utilizing free time (Ecklund col. 3 lines 23-46: once tuning has begun, there is free time since it is not decoding and instead it is doing other things such as disabling gates (Ecklund col. 3 line 35)) resulting from stopping decoding (Ecklund col. 3 lines 23-30: stop sense capacitors

Art Unit: 2631

cause q filter decoders to fully minimize bandwidth – since there is no bandwidth, the decoder has no signal coming in and thus the decoder cannot decode during this time), and selected station changeover means broadcasting station being selected for changing over reception to the broadcasting station searched for (Ecklund col. 2 lines 63-64: after tuning to another station, and thus station is changing over to another station which is selected when tuning is stopped). Thus, it would have been obvious, to one of ordinary skill in the art, at time the invention was made, to arrive at the decoding control means for stopping decoding at least one of the bit frames with one broadcasting station selected, search means for searching for other broadcasting station or stations of satisfactory reception condition utilizing free time resulting from stopping decoding, and selected station changeover means broadcasting station being selected for changing over reception to the broadcasting station searched for as recited by the instant claims, because the combined teaching of Hwang with Ecklund suggest decoding control means for stopping decoding at least one of the bit frames with one broadcasting station selected, search means for searching for other broadcasting station or stations of satisfactory reception condition utilizing free time resulting from stopping decoding, and selected station changeover means broadcasting station being selected for changing over reception to the broadcasting station searched for as recited by the instant claims. Furthermore, one of ordinary skill in the art, would have been motivated to combine the teachings of Hwang with Ecklund because Hwang suggests that the television would change channels (something broad) in general and Ecklund suggests the beneficial use of stopping the tuning to minimize unwanted sounds (Ecklund col. 3 line 30) in the analogous art of receiving.

Art Unit: 2631

6. The recitations in the preamble have not given patentable weight since the recitations recites the intended use of a structure and the body of claim does not depend on the preamble for completeness and the bodily limitations are able to stand alone.

Allowable Subject Matter

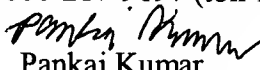
7. Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pankaj Kumar
Patent Examiner
Art Unit 2631

PK